STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

LIST OF DRAWINGS

Title Sheet 1
Estimated Quanities & Construction Notes 2
Culvert Details 3
Plan & Profile 4
Cross Sections 5-8
Detour Plan 9
Right of Way Map 10

TRAFFIC DATA

Current (2016) AADT	1440
Future (2036) AADT	1730
DHV - % of AADT	9%
Design Hour Volume	145
Heavy Trucks (% of AADT)	15%
Heavy Trucks (% of DHV)	15%
Directional Distribution (% of DHV)	51%
18 kip Equivalent P 2.0	156
18 kip Equivalent P 2.5	148
Design Speed (mph)	45 MPH

HYDROLOGIC DATA

Drainage Area	3.25 sq mi
Design Discharge (Q50)	270.2 cfs
Check Discharge (Q100)	314.8 cfs
Headwater Elevation (Q1.1)	649.07 ft
Headwater Elevation (Q25)	650.72 ft
Headwater Elevation (Q50)	651.23 ft
Headwater Elevation (Q100)	651.80 ft
Discharge Velocity (Q1.1)	1.35 fps
Discharge Velocity (Q50)	8.56 fps
Discharge Velocity (Q100)	9.92 fps

ALBANY TWP
OXFORD COUNTY
SONGO POND BRIDGE
OVER
OUTLET SONGO POND
ROUTE 5
STATE PROJECT NO. 020345.00
PROJECT LENGTH 0.02 mi.
BRIDGE NO. 6542

UTILITIES

Central Maine Power Company
Oxford Networks
Time Warner Cable

MAINTENANCE OF TRAFFIC

Maintain one 11'-0" wide lane of alternating two - way traffic using traffic signals through the Woodman's Loop Detour. All other times one 11'-0" wide lane of alternating two-way traffic will be maintained with flaggers.

PROJECT LOCATION	Replacement of Large Culvert located on Route 5 0.41 miles southerly of the intersection of Old West Bethel Road and Route 5 in Albany TWP. Lat./Long. 44°20'43.2" N 70°47'7.55" W
PROGRAM AREA	Highway Program
OUTLINE OF WORK	Replace Existing 5' CMP with an 11'4" span X 7'6" rise X 72' long Horizontal Ellipse Galvanized Multi-Plate Culvert

WIN 20345.00

20345.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
APPROVED — DATE
COMMISSIONER: 4/28/16
CHIEF ENGINEER: 4-28-16

STATE OF MAINE — Guy Whittington 10650 — PROFESSIONAL ENGINEER
P.E. NUMBER 10650 — SIGNATURE
4/15/2016 — DATE

PROJECT INFORMATION

PROGRAM	HIGHWAY
PROJECT MANAGER	GUY WHITTINGTON
DESIGNER	SHANE KELLY
CONSULTANT	
PROJECT RESIDENT	
CONTRACTOR	
PROJECT COMPLETION DATE	

ALBANY TWP
ROUTE 5

TITLE SHEET

SHEET NUMBER
1
OF 10

Filename:\MSTA\001_Title_Bridge.dgn Division: HIGHWAY Username: Jeffrey.Wallace Date:4/15/2016

ESTIMATED QUANTITIES

ITEM NO.	DESCRIPTION	QUANTITY	UNIT
203.20	COMMON EXCAVATION	260	CY
203.25	GRANULAR BORROW	345	CY
203.33	SPECIAL FILL	40	CY
206.07	STRUCTURAL ROCK EXCAVATION	10	CY
304.10	AGGREGATE SUBBASE COURSE- GRAVEL	220	CY
403.208	HOT MIX ASPHALT 12.5 MM HMA SURFACE	30	T
403.213	HOT MIX ASPHALT 12.5 MM BASE	60	T
409.15	BITUMINOUS TACK COAT	30	G
461.13	LIGHT CAPITAL PAVING	90	T
509.12	STEEL STRUCTURAL PLATE PIPE ARCH	1 (35,000 LB)	LS
511.07	COFFERDAM: DOWNSTREAM	1	LS
511.07	COFFERDAM: UPSTREAM	1	LS
526.301	TEMPORARY CONCRETE BARRIER TYPE I (60 LF)	1	LS
610.08	PLAIN RIPRAP	100	CY
613.319	EROSION CONTROL BLANKET	50	SY
615.07	LOAM	35	CY
618.14	SEEDING METHOD NUMBER 2	5	UN
619.12	MULCH	5	UN
619.14	EROSION CONTROL MIX	10	CY
620.58	EROSION CONTROL GEOTEXTILE	150	SY
627.733	4 INCH WHITE OR YELLOW PAINTED PAVEMENT MARKING LINE	300	LF
627.78	TEMPORARY 4" PAINTED PAVEMENT MARKING LINE W OR Y	300	LF
629.05	HAND LABOR, STRAIGHT TIME	10	HR
631.12	ALL PURPOSE EXCAVATOR (INCLUDING OPERATOR)	10	HR
631.172	TRUCK -LARGE (INCLUDING OPERATOR)	10	HR
639.19	FIELD OFFICE TYPE B	1	EA
643.72	TEMPORARY TRAFFIC SIGNAL	1	LS
652.312	TYPE III BARRICADE	4	EA
652.33	DRUM	10	EA
652.34	CONE	25	EA
652.35	CONSTRUCTION SIGNS	450	SF
652.36	MAINTENANCE OF TRAFFIC CONTROL DEVICES	45	CD
652.38	FLAGGER	350	HR
656.75	TEMPORARY SOIL EROSION AND WATER POLLUTION CONTROL	1	LS
659.10	MOBILIZATION	1	LS

GENERAL NOTES

1. Any necessary cleaning of existing pavement prior to paving shall be incidental to the related paving Items.

2. The following shall be incidental to Item 509.12
   - Any cutting of existing culverts and/or connectors necessary to install the new culvert replacement.
   - Any necessary clearing of brush and non-pay trees at culvert ends.
   - All excavation required for the removal of the existing culvert and installation of the proposed structure below ASCG.
   - Removal and disposal of the existing culvert.

3. No existing drainage shall be abandoned or plugged without prior approval of the Resident.

4. Loam shall be placed to a nominal depth of 4" on the inslope.

5. Any damage to the slopes caused by the Contractor's equipment, personnel, or operations shall be repaired to the satisfaction of the Resident. All work, equipment, and materials required to make repairs shall be at the Contractor's expense.

6. During the installation of the new structure, traffic may be routed in accordance with the Detour Plan on Sheet 9 of the plan set. Refer to Special Provision 105 for timeline restrictions on the Detour.

7. For easements, construction limits and right of way lines, refer to Right of Way Map.

8. The clearing limits as shown on the plans are approximate. The exact limits will be established in the field by the Resident. Payment for clearing will be considered incidental to the Contract.

9. Do not excavate for Aggregate Subbase Course where existing material is suitable as determined by the Resident.

10. All embankment material, except as otherwise shown, placed below normal high water elev shall be Granular Borrow meeting the requirements of Subsection 703.19, Material for Underwater Backfill.

11. The hydrologic report of the stream site may be accessed at the MaineDOT web address. The hydrologic report is based on MaineDOT's interpretation of the information obtained for the subject site. No assurance is given that the information or the conclusions of the report will be representative of actual conditions at the time of construction. The MaineDOT web address is http://www.maine.gov/mdot/contractors/.

12. The fill to be placed inside the culvert shall consist of a combination of site-excavated dredge material and special fill material as needed to create a natural stream bottom. All added material shall meet the requirements of Special Provision 203.33. The material shall be placed as directed by the Resident.

13. Saw cut joints shall be considered incidental to Item 203.20

14. All waste material not used on the project shall be disposed of in acceptable waste areas reviewed by the Resident. Grading, seeding, and mulching of waste areas shall be considered incidental to 656 items.

15. No separate payment for superintendent of foreman will be made for the supervision of equipment being paid for under the equipment rental items.

16. All work shall be done in accordance with the Maine Department of Transportation's Best Management Practices for Erosion & Sedimentation Control, February 2008.

17. Stations referenced in the construction notes are approximate.

18. The Contractor shall adhere to the Maine DOT Standard Specification: Section 104.4.10 Coordination of Bridge Closure/Bridge Width Restriction Notification.

19. Stone which cannot be rolled or compacted into the surface of the shoulder shall be removed by hand raking. Payment for hand raking will be considered incidental to Item 304.10 Aggregate Subbase Course - Gravel.

20. Traffic signal lights will be installed for each direction of travel for the duration of the detour. Payment will be made under Item 643.72 as a Lump Sum to include the use of multiple signal lights.

21. Any prep work needed for Woodman's Loop prior to use of the Loop for the detour or prior to paving shall be paid for through Equipment Rental Items.

22. Paving of Woodman's Loop shall be paid under Item 461.13. Woodman's Loop will be paved at a 12' width or as directed by the resident.

23. Horizontal elliptical pipe shall be 1 guage steel.

GEOTECHNICAL NOTES

1. The Geotechnical Report For This Project, GEOTECHNICAL DESIGN REPORT FOR CONSTRUCTION OF SONGO POND BRIDGE OVER CROOKED RIVER (STATE ROUTE 5) ALBANY TOWNSHIP, MAINE, MAINE DOT SOILS REPORT NUMBER 2015-24, OCTOBER 1, 2015 may be accessed at the following web address: http://www.maine.gov/mdot/contractors/.

2. Geotechnical information referenced in this plan set is for the Bidders' and Contractor's use. No assurance is given that the information or interpretations will be representative of actual subsurface conditions at the time of construction. The Department shall not be responsible for the Bidder's and Contractor's interpretation of, or conclusions drawn from, the geotechnical information. The Boring Logs contained in the Geotechnical Report present interpretive subsurface information collected at discrete locations. Data provided may not be representative of the subsurface conditions between boring locations.

3. Where new embankment fills are placed on existing slopes steeper than 2H:1V and as shown on the plans, the existing slope shall be continiously benched as per Standard Specification 203.09 and OSHA requirements for excavation.

4. Cobbles and boulders larger than 6 inches encountered at subgrade shall be removed. Holes below subgrade that result from their removal shall be backfilled with native soil and compacted. Payment will be incidental to Item 203.20.

5. The entire embankment, including the areas beyond the 1.5H:1V line extending from the finished shoulder, shall be compacted.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

020345.00

PIN 20345.00

HIGHWAY PLANS

		BY	DATE
PROJ. MANAGER	G. WHITTINGTON		
DESIGN-DETAILED	S. Kelly		
CHECKED-REVIEWED			
DESIGN2-DETAILED2	J. Wallace		JAN 2015
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

ALBANY TWP
ROUTE 5

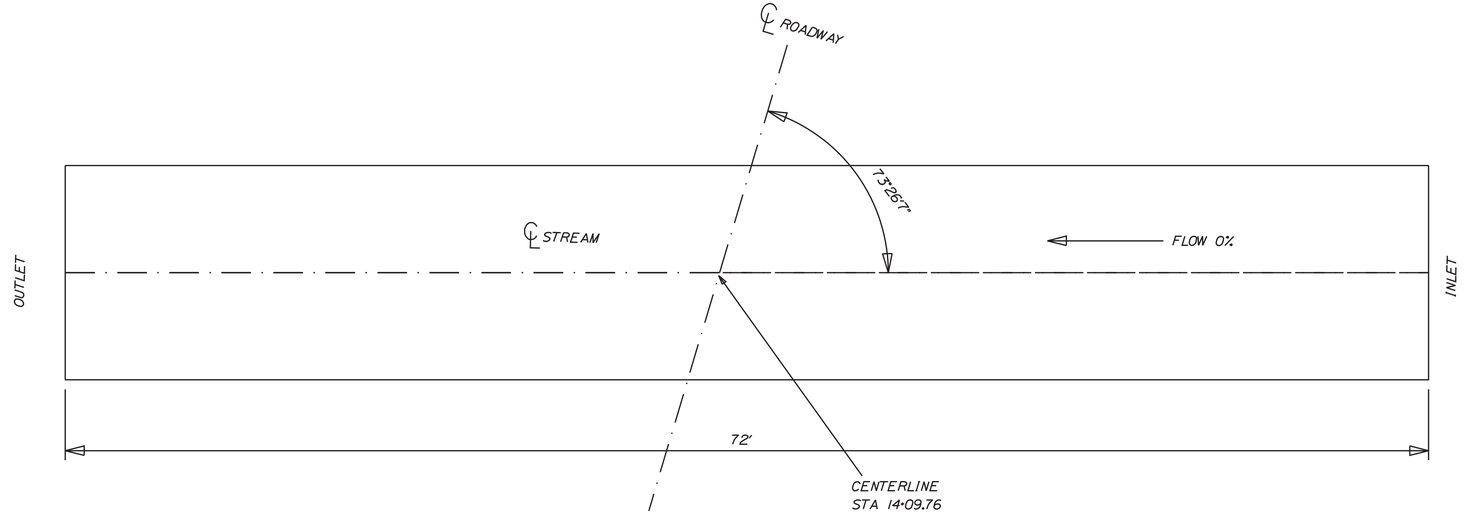
ESTIMATED QUANTITIES &
CONSTRUCTION NOTES

SHEET NUMBER

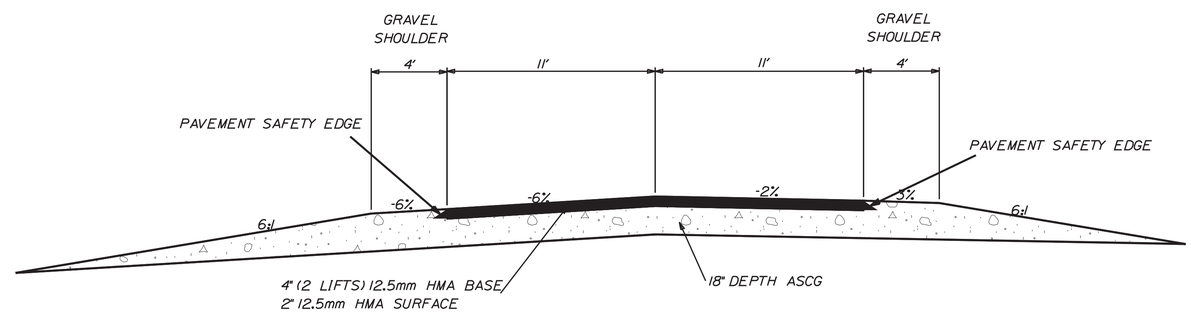
2

OF 10

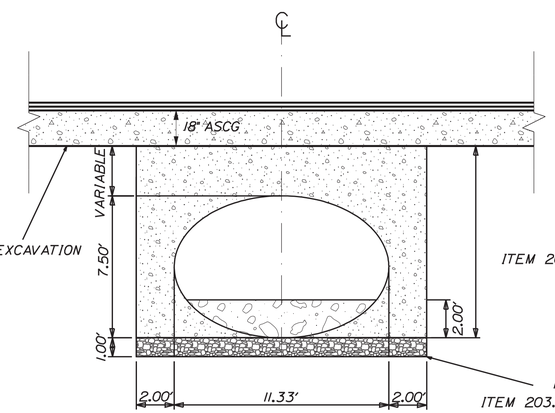
Filename: $file$ Division: $wkgroup$ Username: $user$ Date:$date$



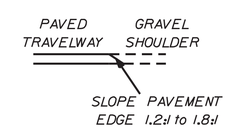
PLAN VIEW



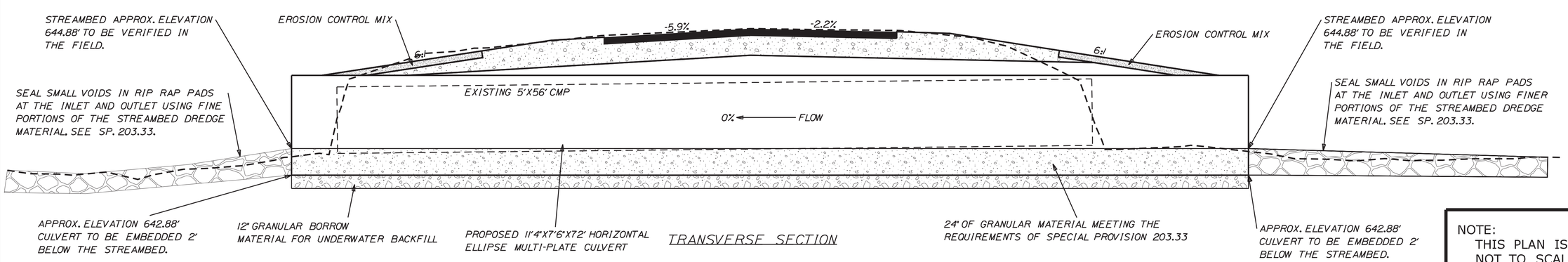
TYPICAL FULL CONSTRUCTION SECTION



EXCAVATION AND FILL PAY LIMITS



TYPICAL PAVEMENT SAFETY EDGE



TRANSVERSE SECTION

NOTE:
THIS PLAN IS NOT TO SCALE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

020345.00

PIN 20345.00

HIGHWAY PLANS

	BY	DATE
PROJ. MANAGER	C. WHITTINGTON	
DESIGN-DETAILED	S. KELLY	
CHECKED-REVIEWED		JAN 2015
DESIGN2-DETAILED2	J. WALLACE	
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

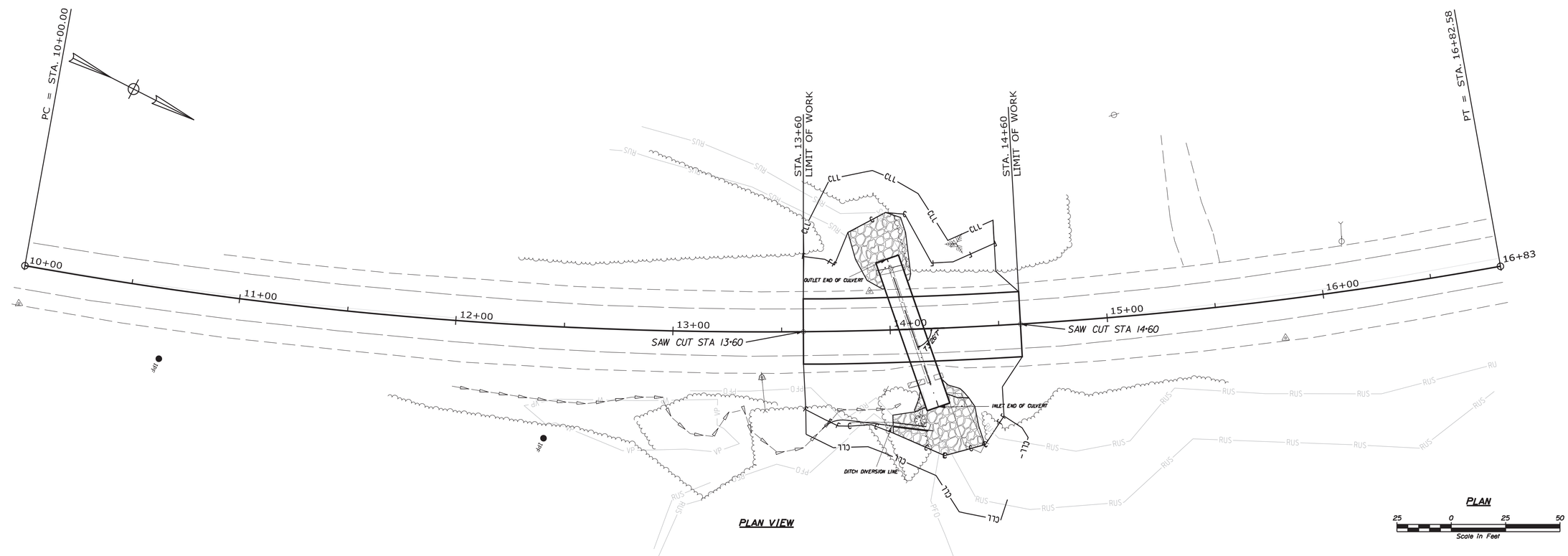
DATE

ALBANY TWP
ROUTE 5

CULVERT DETAILS

SHEET NUMBER
3
OF 10

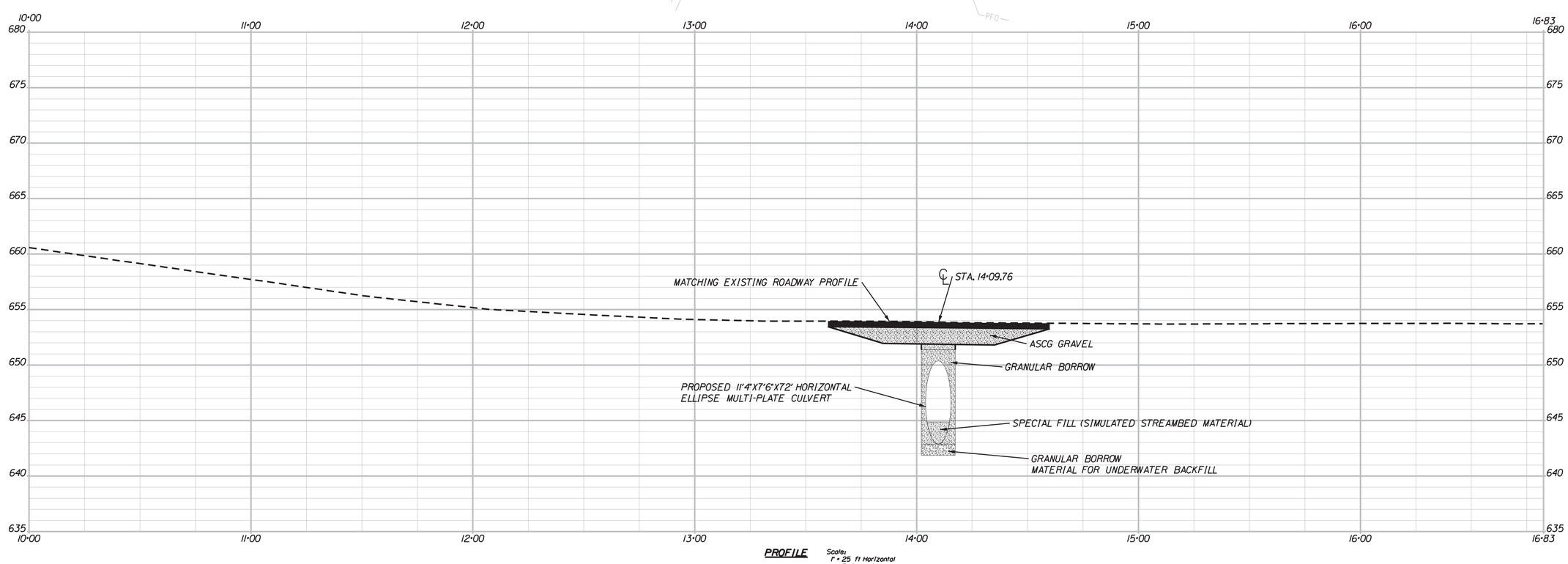
Filename: ...\003_Typical Culvert Details.dgn Division: HIGHWAY Username: Jeffrey.Wallace Date:4/19/2016



PLAN VIEW

PLAN

25 0 25 50
Scale In Feet



PROFILE

Scales:
1" = 25 ft Horizontal
1" = 5 ft Vertical

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

020345.00

PIN
20345.00

HIGHWAY PLANS

PROJ. MANAGER	C. WHITTINGTON	BY	DATE
DESIGN-DETAILED	S. KELLY		
CHECKED-REVIEWED			
DESIGN2-DETAILED2	J. WALLACE		JAN 2015
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

ALBANY TWP
ROUTE 5

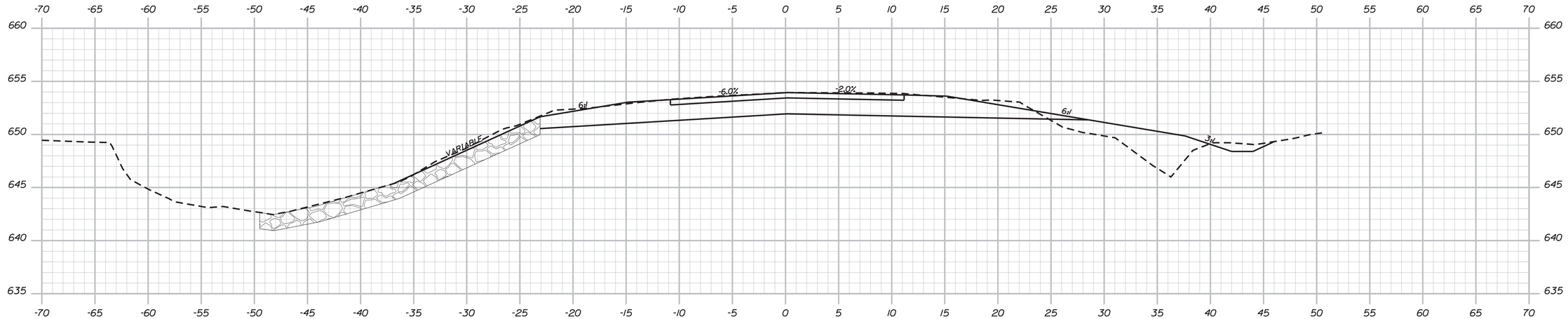
PLAN & PROFILE

SHEET NUMBER

4

OF 10

Filename: ...\MSTA\004_Plan & Profile.dgn Division: HIGHWAY Username: Jeffrey.Wallace Date:4/19/2016



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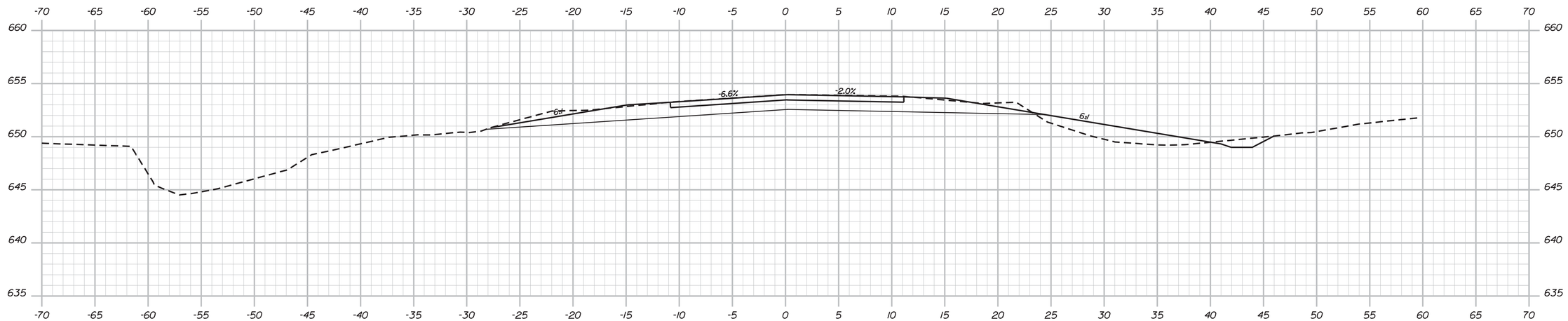

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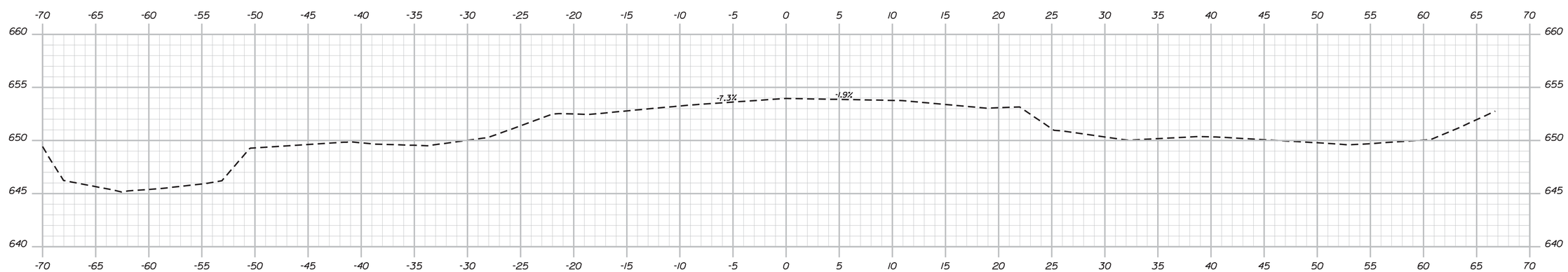


13+60.00 (MATCH EXISTING)

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

020345.00

PIN
20345.00

HIGHWAY PLANS

PROJ. MANAGER	C. WHITTINGTON	BY	DATE
DESIGN-DETAILED	S. Kelly	----	----
CHECKED-REVIEWED	----	----	----
DESIGN2-DETAILED2	J. WALLACE	----	JAN 2015
DESIGN3-DETAILED3	----	----	----
REVISIONS 1	----	----	----
REVISIONS 2	----	----	----
REVISIONS 3	----	----	----
REVISIONS 4	----	----	----
FIELD CHANGES	----	----	----

SIGNATURE

P.E. NUMBER

DATE

ALBANY TWP
ROUTE 5

CROSS SECTIONS

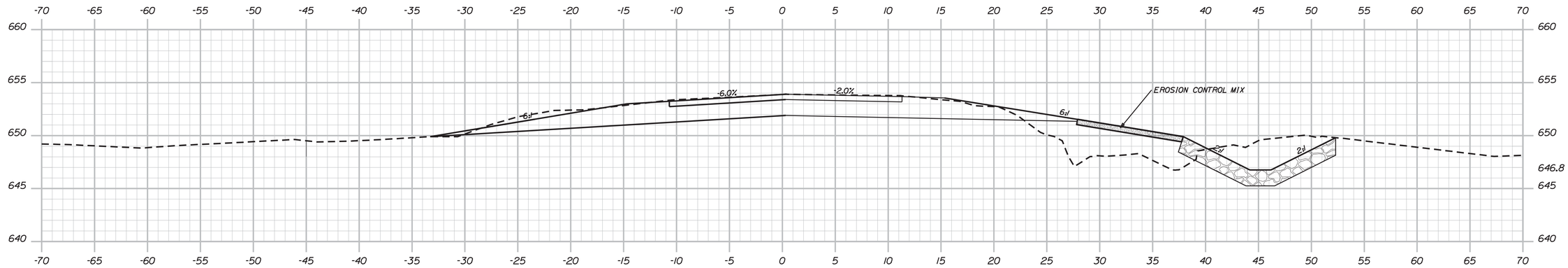
SHEET NUMBER

5

OF 10

Sta. 13+60.00 to Sta. 13+90.00

Filename: ...\00\HIGHWAY\MSTA\005_Xsect.dgn Division: HIGHWAY Username: Jeffrey.Wallace Date:4/15/2016



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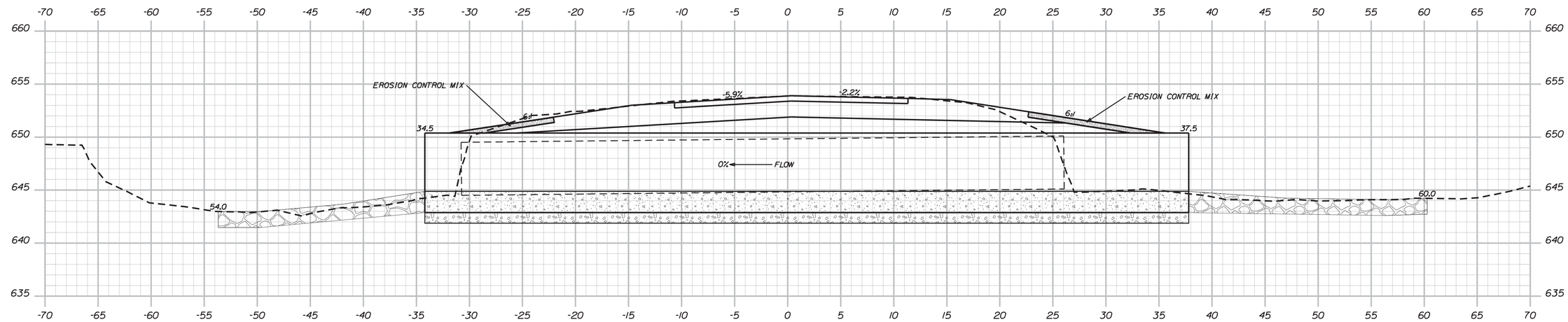

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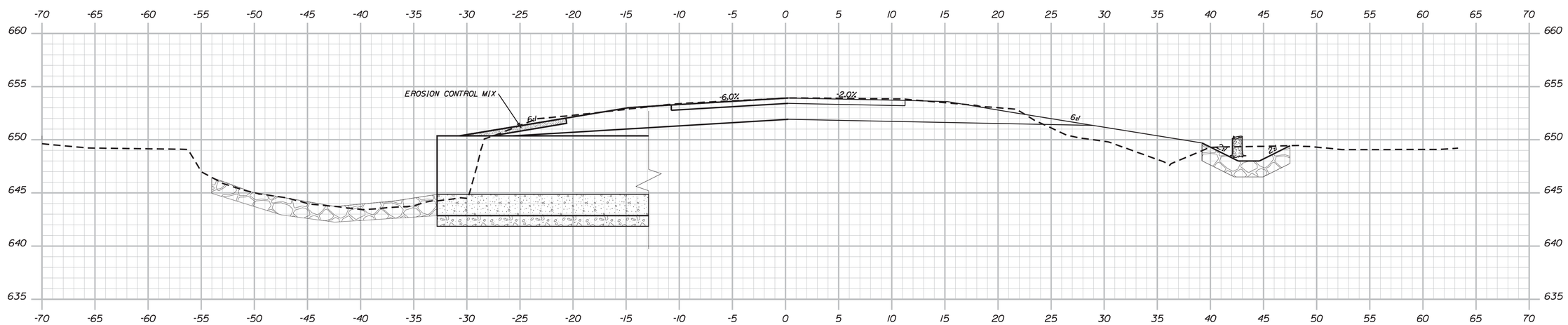

14+00.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

020345.00

PIN
020345.00

HIGHWAY PLANS

PROJ. MANAGER	C. WHITTINGTON	BY	DATE
DESIGN-DETAILED	S. Kelly		
CHECKED-REVIEWED			
DESIGN2-DETAILED2	J. WALLACE		JAN 2015
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

ALBANY TWP
ROUTE 5

CROSS SECTIONS

SHEET NUMBER

6

OF 10

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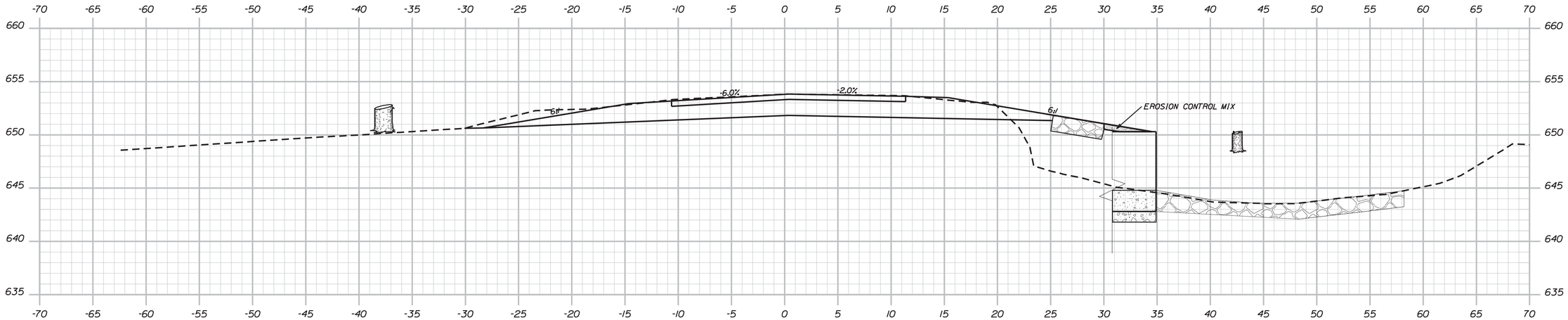

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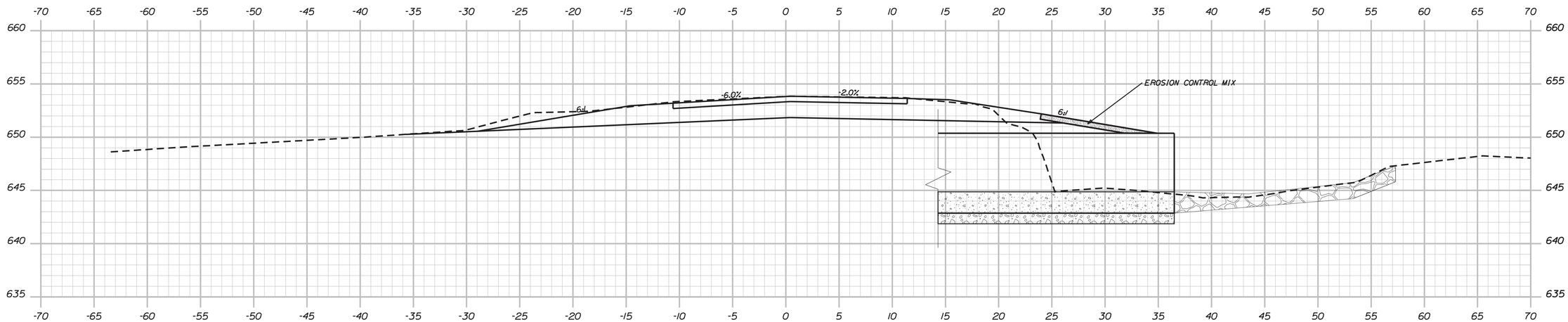

14+20.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

020345.00

PIN
20345.00

HIGHWAY PLANS

	BY	DATE
PROJ. MANAGER	C. WHITTINGTON	
DESIGN-DETAILED	S. Kelly	
CHECKED-REVIEWED		
DESIGN2-DETAILED2	J. WALLACE	JAN 2015
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REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

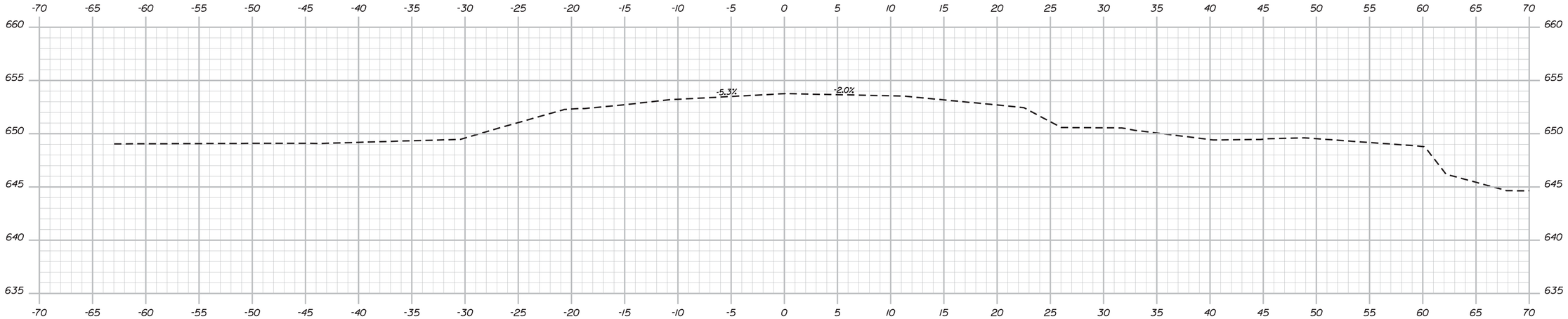
ALBANY TWP
ROUTE 5

CROSS SECTIONS

SHEET NUMBER
7
OF 10

Filename: ...\00\HIGHWAY\MSTA\007_Xsect.dgn Division: HIGHWAY Username: Jeffrey.Wallace Date:4/19/2016

Sta. 14+20.00 to Sta. 14+25.00



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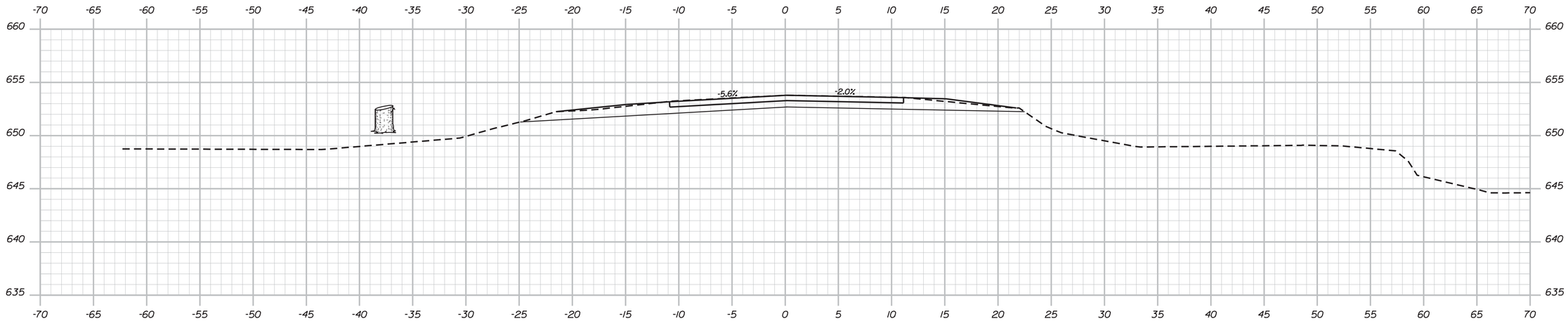

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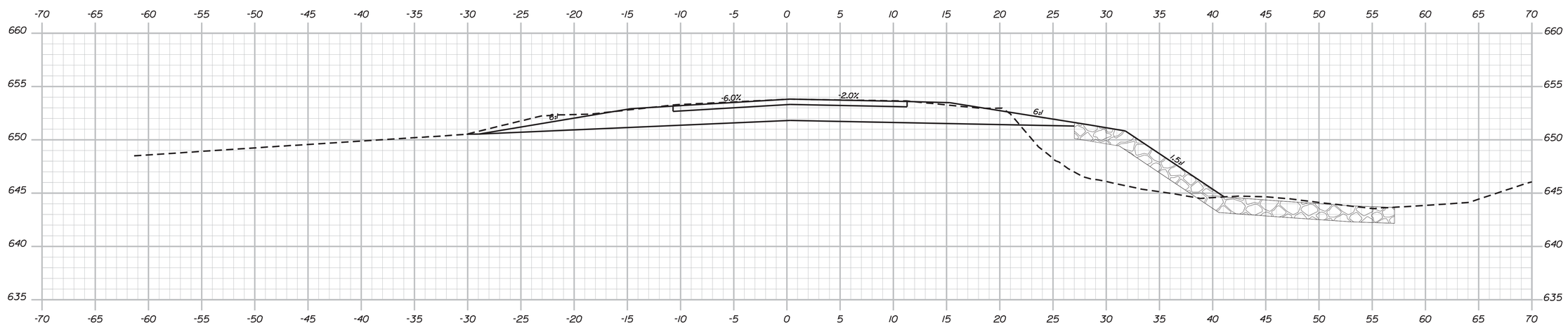


14+30.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

020345.00

PIN
020345.00

HIGHWAY PLANS

		BY	DATE
PROJ. MANAGER	C. WHITTINGTON		
DESIGN-DETAILED	S. Kelly		
CHECKED-REVIEWED			
DESIGN2-DETAILED2	J. WALLACE		JAN 2015
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

ALBANY TWP
ROUTE 5

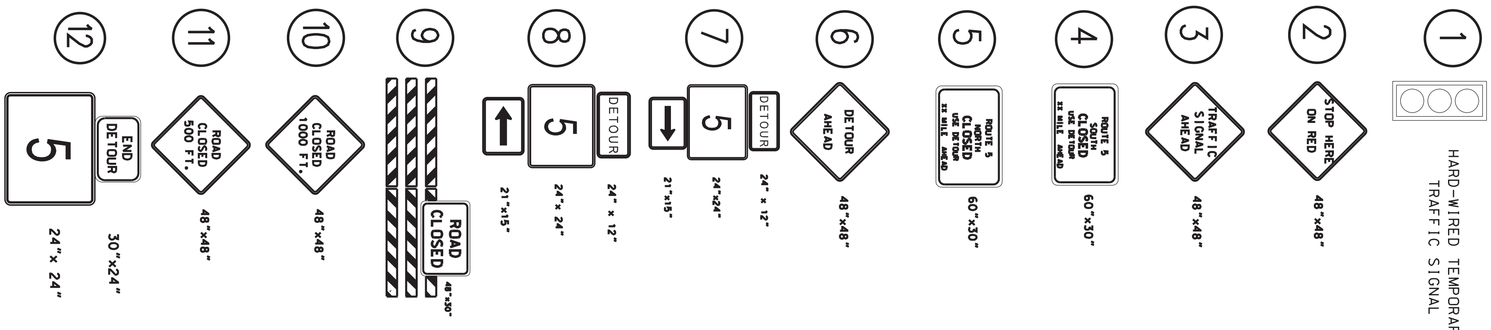
CROSS SECTIONS

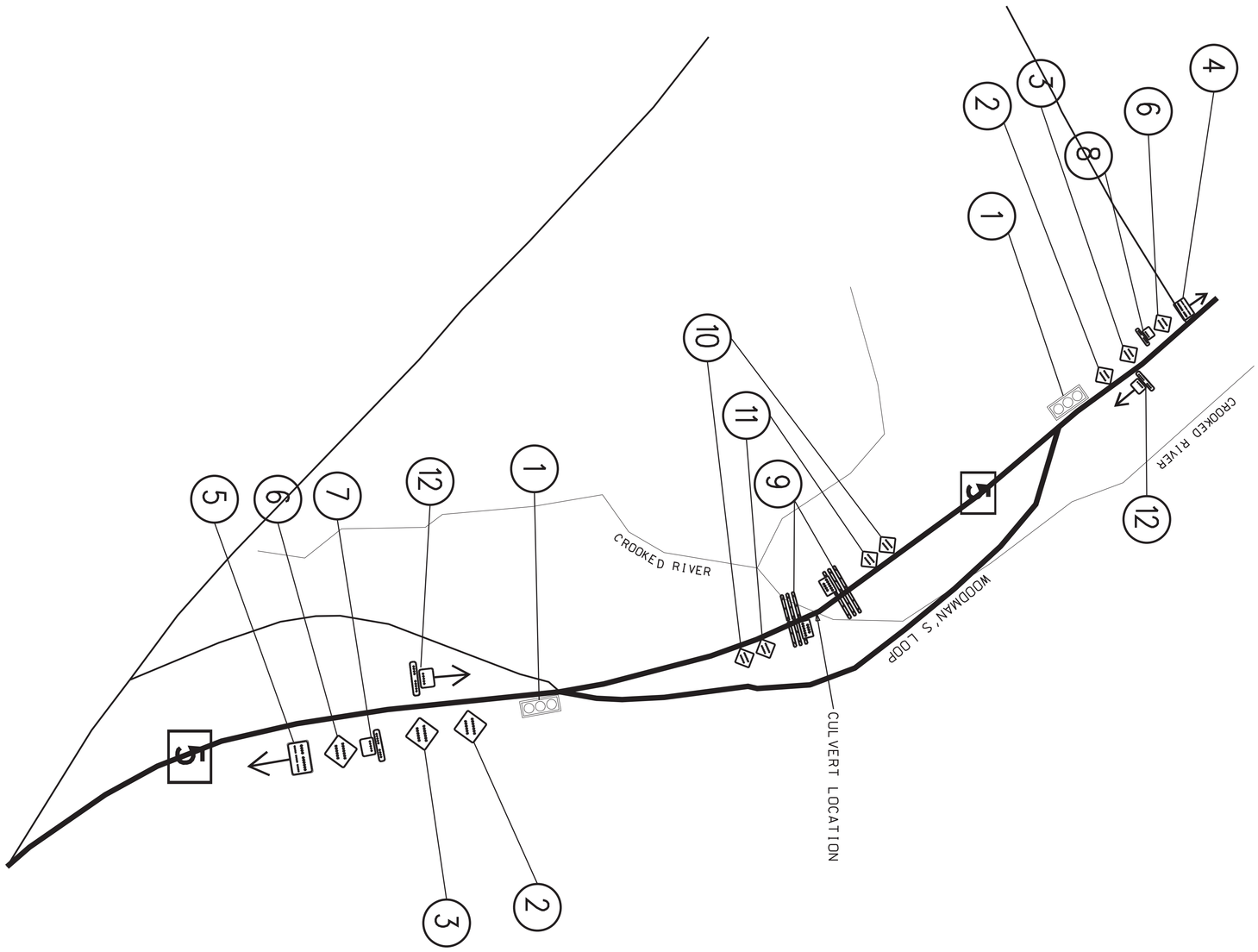
SHEET NUMBER
8
OF 10

Sta. 14+30.00 to Sta. 14+60.00

Filename: ...\00\HIGHWAY\MSTA\008_Xsect.dgn Division: HIGHWAY Username: Jeffrey.Wallace Date:4/15/2016

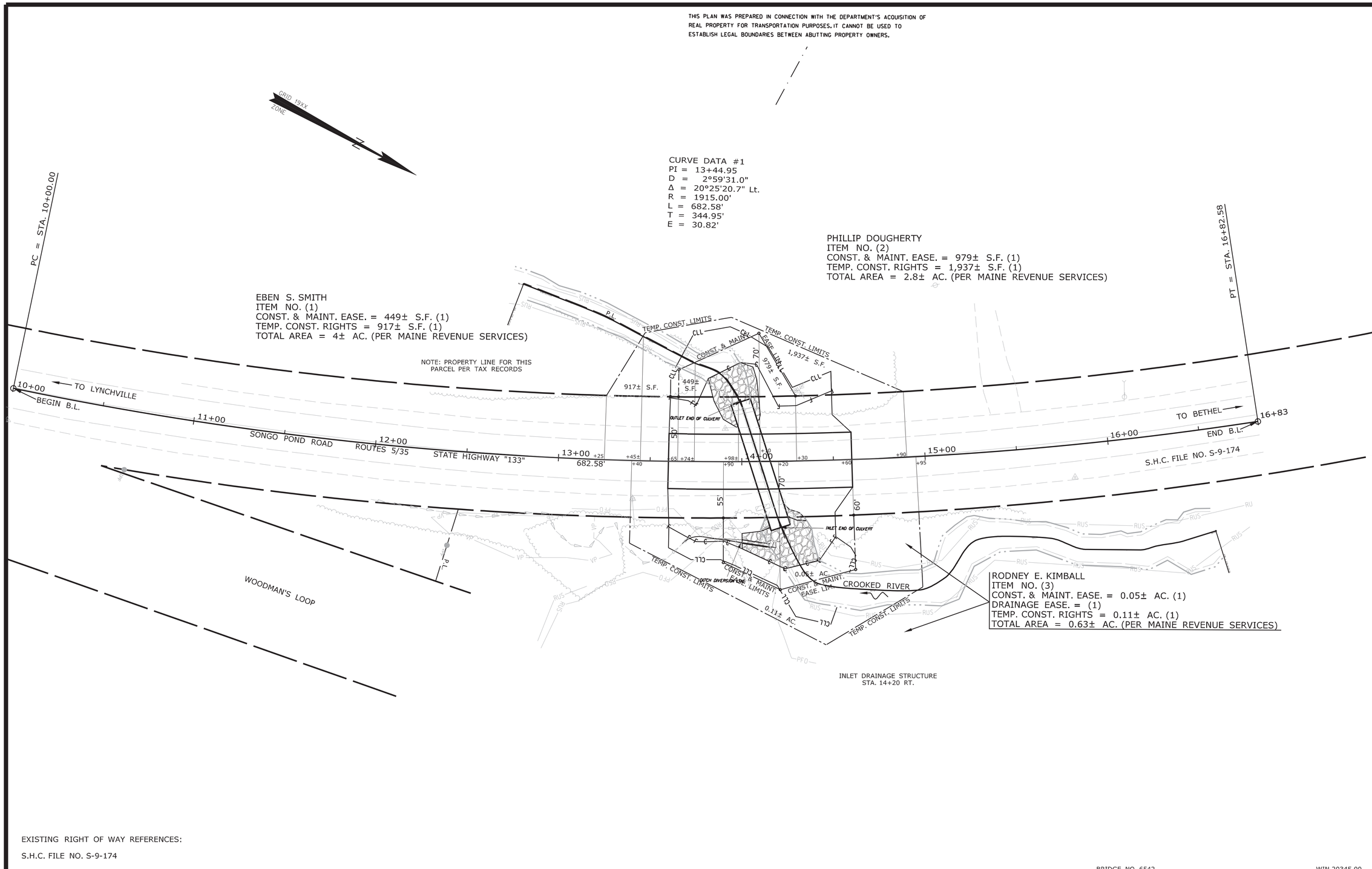
Filename: ...\MSTA\009_DetourPlan.dgn Division: HIGHWAY Username: Jeffrey.Wallace Date:4/15/2016





SHEET NUMBER 9 OF 10	ALBANY TWP ROUTE 5 DETOUR PLAN	PROJ. MANAGER G. WHITTINGTON / BY / DATE DESIGN-DETAILED S. Kelly CHECKED-REVIEWED DESIGN2-DETAILED2 JAN 2015 DESIGN3-DETAILED3 REVISIONS 1 REVISIONS 2 REVISIONS 3 REVISIONS 4 FIELD CHANGES	SIGNATURE P.E. NUMBER DATE	STATE OF MAINE DEPARTMENT OF TRANSPORTATION 020345.00 WIN 20345.00 HIGHWAY PLANS

THIS PLAN WAS PREPARED IN CONNECTION WITH THE DEPARTMENT'S ACQUISITION OF REAL PROPERTY FOR TRANSPORTATION PURPOSES. IT CANNOT BE USED TO ESTABLISH LEGAL BOUNDARIES BETWEEN ABUTTING PROPERTY OWNERS.



EXISTING RIGHT OF WAY REFERENCES:

S.H.C. FILE NO. S-9-174

BRIDGE NO. 6542

WIN 20345.00

SYMBOLS

- IP or ● IPF (IRON PIPE or PIN FOUND)
- S.T. (SEPTIC TANK)
- (ROW MONUMENT)
- (TRAVERSE POINT)
- WELL (WELL)
- GRADING LIMIT LINE
- CONSTRUCTION LIMIT LINE
- PROPERTY LINE
- LIMITS OF WROUGHT PORTION (L.O.W.P.)
- EXISTING RIGHT OF WAY
- NEW RIGHT OF WAY
- NEW ROW WITHIN EXIST. ROW
- CONTROL OF ACCESS
- WATER LINE
- GAS LINE
- ELECTRIC LINE
- TELEPHONE LINE
- SEWER LINE

ITEM	TECH	CHECKED
BASE MAP		
EXIST. R/W	PNS	
PROP. LINES	PNS	
AREAS		

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
16 STATE HOUSE STATION - AUGUSTA, ME 04333-0016
ALBANY TOWNSHIP
RIGHT OF WAY MAP

REVISIONS			
NO.	DATE	DESCRIPTION	BY

PLAN FILED IN PLAN BOOK PAGE COUNTY RECORD

NO.	GRANTOR	INSTRUMENT	DATE	BOOK	PAGE

DAVID BERNHARDT
COMMISSIONER
JOYCE NOEL TAYLOR
CHIEF ENGINEER
DATE

STATE HIGHWAY "133"
ROUTES 5/35 SONGO POND ROAD
ALBANY TOWNSHIP OXFORD COUNTY
STATE PROJECT NO. 20345.00

JUNE 2015 | RIGHT-OF-WAY MAP | D.O.T. FILE NO. 9-383
SCALE 1" = 25' | SHEET 1 OF 1

SHEET NUMBER
10
OF 10

Filename: ...\HIGHWAY\MSTA\010_RWPLAN1.dgn Division: HIGHWAY Username: Jeffrey.Wallace Date:4/15/2016